ATTORNEY DOCKET NO.: 000259

Page 1 of 6

AS BEL	OW NAMED INVENTOR, I	HEREBY DECLARE THAT: T	his Declaration is of the	ne following type:		
	Original Continuation	☐ Supplemental	Continuation-		☐ Divisional	
name is	listed below) or an original, fi	citizenship are as stated below n rst and joint inventor (if plural i ME TRACKING IN A NO	names are listed below	) of the subject mat	ter which is clain	ned and for which a
	was amended on (if app	001 as Serial No. 09/964,589 licable). PCT International Application N	o. filed on	and as amended u	under PCT Article	e 19 on .
amendm	state that I have reviewed a sent referred to above. I ackno le 37, Code of Federal Regular	nd understand the contents of wledge the duty to disclose info ions, Sec. 1.56(a).	the above-identified s rmation which is mate	pecification, includerial to the examinat	ling the claims, a ion of this applic	as amended by any cation in accordance
I hereby	claim foreign priority benefits	s under Title 35, United States (	Code, Sec. 119 of any	foreign application	(s) for patent or i	nventor's certificate
identifie	d below any foreign application an the United States of Americ	on(s) for patent or inventor's cert a filed by me on the same subje	ificate or any PCT Into	rnational application	on(s) designating	elow and have also at least one country
identifie other tha	d below any foreign application an the United States of Americ	n(s) for patent or inventor's cert	ificate or any PCT Into	rnational application	on(s) designating	elow and have also at least one country (s) of which priority
identifie other that is claime	d below any foreign application an the United States of Americ	n(s) for patent or inventor's cert	ificate or any PCT Into	ernational applications and the detection of the detectio	on(s) designating of the application(	elow and have also at least one country (s) of which priority
identifie other that is claime	d below any foreign application the United States of Americal.  (Country)	n(s) for patent or inventor's cert a filed by me on the same subje	ificate or any PCT Into ct matter having a filir (Day/Month/Year/F	ernational applications date before that o	on(s) designating of the application(  Priority Cla  (Yes)	elow and have also at least one country (s) of which priority aimed
identifie other that is claime	d below any foreign application the United States of Americal.  (Country)  claim the benefit under Title 3	n(s) for patent or inventor's cert a filed by me on the same subje  (Application No.)  5 USC 119(e) of any United Sta	ificate or any PCT Intect matter having a filir  (Day/Month/Year/F	ernational applications date before that o	on(s) designating of the application(  Priority Cla  (Yes)	elow and have also at least one country (s) of which priority aimed
identifie other that is claime	d below any foreign application the United States of Americal.  (Country)	n(s) for patent or inventor's cert a filed by me on the same subje  (Application No.)  5 USC 119(e) of any United Sta	ificate or any PCT Into ct matter having a filir (Day/Month/Year/F	ernational applications date before that o	on(s) designating of the application(  Priority Cla  (Yes)	elow and have also at least one country (s) of which priority aimed
I hereby	d below any foreign application and the United States of Americal.  (Country)  claim the benefit under Title 3  60/261,402  (Serial No.)  claim the benefit under Title f this application is not disclosed the duty to disclose mainly application and the sedge the duty to disclose mainly application and the sedge the duty to disclose mainly application and the sedge the duty to disclose mainly application and the sedge the duty to disclose mainly application and the sedge the duty to disclose mainly application and the sedge the duty to disclose mainly application and the sedge the	n(s) for patent or inventor's cert a filed by me on the same subje  (Application No.)  5 USC 119(e) of any United Sta	(Day/Month/Year/Futes provisional application application (s) listed plication in the manner Title 37 CFR 1.56(a)	riled)  ition(s) listed below below, and insofar	Priority Cla  (Yes)  as the subject m	elow and have also at least one country (s) of which priority aimed (No)

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith: Russell B. Miller, Reg. No. 31,122, Gregory D. Ogrod, Reg. No. 30,880, Bruce W. Greenhaus, Reg. No. 37,339, Charles D. Brown, Reg. No. 28,285, Thomas R. Rouse, Reg. No. 40,793, Kent D. Baker, Reg. No. 38,822, Thomas M. Thibault, Reg. No. 42,181, Christopher O. Edwards, Reg. No. 36,127, Pavel Kalousek, Reg. No. 44,178, Kyong H. Macek, Reg. No. 42,977, Byron Yafuso, Reg. No. 45,244, Kevin J. Clark, Reg. No. 42,421, Sean English, Reg. No. 37,319, Roger W. Martin, Reg. No. 39,291, Sandip S. Minhas, Reg. No. 44,945, Michael D. Hartogs, Reg. No. 36,547, Philip R. Wadsworth, Reg. No. 29,219 and S. Hossain Beladi, Reg. No. 42,311, Albert J. Harnois, Reg. No. 46,123, Sandra L. Godsey, Reg. No. 42,589, George C. Pappas, Reg. No 35,065, Howard H. Seo., Reg. No. 43,106. Please direct all telephone calls to Philip R. Wadsworth at (858) 651-4404 and address all correspondence to: Sarah Kirkpatrick, Manager, Intellectual Property Administration, QUALCOMM Incorporated, 5775 Morehouse Drive, San Diego, California 92121-1714.

ATTORNEY DOCKET NO.: 000259

Page 2 of 6

Full Name of Sole or First Inventor Roland Reinhard Rick	Inventor Signature	Date 1/22/02
Residence 11456 Northwick Way, San Diego, Ca 92	2131	Citizenship United States
Post Office Address 11456 Northwick Way, San Diego, Ca 92	2131	

ATTORNEY DOCKET NO.: 000259

Page 3 of 6

Full Name of Second Inventor	Inventor Signature	Date / /	
Parvathanathan Subrahmanya	Mulrahmanya,	1/23/02	
Residence		Citizenship	
468 Madera Avenue, #1, Sunnyvale, Ca 940	86	India	
Post Office Address			
468 Madera Avenue, #1, Sunnyvale, Ca 940	86		

TTORNEY DOCKET NO.: 000259

Page 4 of 6

Full Name of Third Inventor Brian K. Butler	Inventor Signature	Date Jan 24, 2002
Residence 2171 Via Nina, La Jolla, Ca 92037		Citizenship United States
Post Office Address 2171 Via Nina, La Jolla, Ca 92037		

ATTORNEY DOCKET NO.: 000259

Page 5 of 6

Full Name of Fourth Inventor Shimman Patel	Inventor Signature Vatel	Date ///5/01
Residence 9406 Galvin Avenue, San Diego, Ca 92126		Citizenship United States
Post Office Address 9406 Galvin Avenue, San Diego, Ca 92126		

ATTORNEY DOCKET NO.: 000259

Page 6 of 6

Full Name of Fifth Inventor Thunyachate Ekvetchavit	Inventor Signature	Date 1/25/02
Residence 3737 Nobel Dr., San Diego, Ca 92122		Citizenship Thailand
Post Office Address 3737 Nobel Dr., San Diego, Ca 92122		



APRIL 24, 2002

PTAS

Chief Information Officer Washington, DC 20231 www.uspto.gov

QUALCOMM INCORPORATED GEORGE C. PAPPAS 5775 MOREHOUSE DRIVE SAN DIEGO, CA 92121-1714



UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

000259

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/20/2002

REEL/FRAME: 012616/0438

NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR''S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RICK, ROLAND REINHARD

DOC DATE: 01/22/2002

ASSIGNOR:

PARVATHANATHAN, SUBRAHMANYA

DOC DATE: 01/23/2002

ASSIGNOR:

BUTLER, BRIAN K.

DOC DATE: 01/24/2002

ASSIGNOR:

PATEL, SHIMMAN

DOC DATE: 01/15/2002

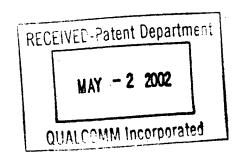
ASSIGNOR:

EKVETCHAVIT, THUNYACHATE

DOC DATE: 01/25/2002

ASSIGNEE:

QUALCOMM INCORPORATED A DELAWARE CORPORATION 5775 MOREHOUSE DRIVE SAN DIEGO, CALIFORNIA 92121-1714



012616/0438 PAGE 2

SERIAL NUMBER: 09964589

PATENT NUMBER:

FILING DATE: 09/25/2001

ISSUE DATE:

LAZENA MARTIN, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

	FEB 2 0 2002 RECO	: MENN NUN ANN NUN NUN	1-2002 Managan	U.S. Department of Comme Patent and Trademark Office
	PA SS	: <b>****</b> ********************************		PATENT
TO: The Co	mmissione of Rateous and Trademarks	1020	01175	Attorney Docket No.: 0002
Subminion	Туре	r lease record the attac	thed original document	(s) or copy(ies).
	mission (Non-Recordation)	ĕ	OTTACARTICE I ADS	
D	TO 11		Change of Name	
Carrec	tion of PTO Error 2-25	1-07	License	
1 10000 14	o. Frame No. tive Document		Merger Security Agreeme	nt.
Reel N	0. Frame No.		Other:	at.
Couveying	Party(les) Mark if additional nar	nes are attached		
	NAMI			
Roland Rein	hard Dick			EXECUTION DATE
	an Subrahmanya			Month, Day, Year (MMDDYYYY) 01/22/2002
Brise K. But	ler			01/23/2002
Shimman Pat	el .			01/24/2002
Thunyachate	Ekvetchavit			01/15/2002
Receiving Pa	orty(les) Mark if additional nam	es are attached		01/25/2002
Name:	QUALCUMM Incorporated	macical		
Address	A Delaware Corporation 5775 Morehouse Drive			
Address	San Diego, California 02121 1	714		
Corresponde	nce Name and Address			
Name:	QUALCOMM Incorporated (P	TO Customer No. 236	(06) Train	
Address	Attn: Patent Department 5775 Morehouse Drive	250	Facsimile:	Number: (858) 651-1179
Address	San Diego California con a con	<b>11.4</b>		(030) 038-2302
Pages (Enter	the total number of pages of the atta	Ched conveyers 1		
Iotal mmber	the total number of pages of the atta of pages: six	ched conveyance doc	ument including any	attachments)
If this decume	Applica	tion Number(s) or P	atent Number(e)	
Patent Applica	Applicant is being filed together with a nation Number(s):	ew application, the	execution date of the	application in
	00/06/1/600	1 4 (	atent Number(s):	application B:
Number of Pro	perties (Enfer the total number of	Properties involved)		
Fee Amount	of properties: one			
Method of	Payment: Ti Factor 4 53 -	Fee Amount for I	Properties Listed (37	CER 1 41) Ave
Deposit Acc	Payment: DEnclosed Deposition to Charge additional Company	/	cate of this sheet is e	Dolosed for fee processing
		: II No	•	ior rec processing)
			<del></del>	
Opy of the orio	of my knowledge and belief, the	foregoing informatio	n is true and correct	t and any attached copy is a true
	inal document. Charges to depor	sit account are autho	rized, as indicated i	nerein
· 1/28/U2				
ame: George	C. Pappas, Reg. No. 35,065		ignature:	. \ >
858-651	-1306	3	Bulature:	
		OR OFFICE USE		$\sim$
	) .	OR OFFICE USE O	UNLY	
2002 AAHMEDI (	00000123 170026 09964589			
	).00 CH	•		

## TO WHOM IT MAY CONCERN:

For the sum of One Dollar and other valuable consideration to us in hand paid, receipt of which is hereby acknowledged, be it known that I,

- 1. Roland Reinhard Rick, a citizen of the United States, having a place of residence at 11456 Northwick Way, San Diego, Ca 92131;
- 2. Parvathanathan Subrahmanya, a citizen of India, having a place of residence at 468 Madera Avenue, #1, Sunnyvale, Ca 94086;
- 3. Brian K. Butler, a citizen of the United States, having a place of residence at 2171 Via Nina, La Jolla, Ca 92037;
- 4. Shimman Patel, a citizen of the United States, having a place of residence at 9406 Galvin Avenue, San Diego, Ca 92126; and
- 5. Thunyachate Ekvetchavit, a citizen of Thailand, having a place of residence at 3737 Nobel Dr., San Diego, Ca 92122;

have sold, assigned and transferred and by these presents do sell, assign, transfer and set over unto QUALCOMM Incorporated, a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, its successors, legal representatives, or assigns, the entire right, title and interest in and to a certain invention relating to a TIME TRACKING IN A NON-NEGLIGIBLE MUTLIPATH SPACING ENVIRONMENT by me co-devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on September 25, 2001, and assigned Application Number 09/964,589 and all original and reissue patents granted thereof, and all divisions, and continuations thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that I have full right to do so, and agree that

I will communicate to said corporation or its representatives all facts known to me respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

The Commissioner of Patents and Trademarks is requested to issue the Letters Patent which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at San Diego, California this 22 day of January, 2002.

Roland Reinhard Rick

Done at Sunnyvale, California this 23 day of January, 2002.	
- Hulrakmany 5.	
Parvathanathan Suhrahmanya	•

Done at San Diego, California this 24 day of Jan, 2002.

Brian K. Butler

Done at San Diego, California this BH day of Junior 2002.

Shimman Patel

Done at San Diego, California this 25 day of Jawayy, 2002.

Thunyachate Ekvetchavit